HDodohara:hd/OPPT-NPCD-FOB/8-2-00/7404/260-3959/Rm ET837/"CSI.wpd"
FOB Chron:Reading File/DS File/Subject File
plasma arc, permit, query

AUG 3 2000

Geary D. Cook, Vice President Operations
CSI Environmental
3000 Alta Blvd, Suite 105
Fort Worth, Texas 76133

Mr. Geary Cook:

This letter responds to your query to John Melone dated July 31, 2000 regarding your Plasma Waste Converter (PWC) which employs plasma arc technology to convert waste to usable products such as syngas, silicates and metals. You asked for requirements to obtain approval as an alternative PCB decontamination method under 40 CFR 761.79(h). The PCB rule at §761.79(h) only applies to the use of physical means of decontaminating liquids or solid surfaces using methods such as solvent extraction, distillation or filtering. Because plasma arc destroys PCBs, the technology must be approved under §761.60(e), for alternative disposal technology. Alternative disposal technology must demonstrate effectiveness equivalent to PCB incineration. Your claim that these products are recyclable material under the RCRA 40 CFR 261 rule, and therefore bypasses the permitting procedures, is not applicable under TSCA. To comply with the PCB incineration equivalency, the syngas produced by the PWC must meet 99.9999% destruction and removal efficiency (DRE) of PCBs, the silicates must contain less than 2 ppm PCBs, and the metal must contain less than 2 ppm PCBs or the surface must exhibit less than 10 micrograms per 100 square centimeter of surface. Any contact process water must contain less than 3 ppb PCBs prior to discharge or reuse.

To obtain an approval, you must submit for review by our office an alternative PCB Disposal approval application and a demonstration plan. After the documents are reviewed and accepted, a demonstration will be scheduled for EPA to observe the process in operation and to collect split samples of the product streams for analysis. Upon completion of the demonstration, you must prepare a formal test report for our review. An operating approval will be developed based on the test report. Enclosed are documents to assist your preparation of the PCB Disposal Approval Application and Demonstration Plan.

I hope this reply responds to your questions. Please feel free to contact Hiroshi Dodohara at (202) 260-3959 for questions regarding this matter.

Sincerely,

/S/

Tony Baney, Chief
Fibers and Organic Branch

Enclosure:

cc: John Melone, Director
NPCD w/o Enclosure

Tony Baney
08/01/2000 07:21 AM

To: Hiroshi Dodahara@EPA
cc: John Melone/DC/USEPA/US@EPA, JohnH Smith/DC/USEPA/US@EPA

Subject: USEPA PCB Letter

Dody:
Please reply to this fellow. It looks to me like he is confused about §761.79(h) and what he needs is a §761.60(e) alternate PCB disposal approval.
Thanks
Tony

---------- Forwarded by Tony Baney/DC/USEPA/US on 08/01/2000 07:22 AM ----------

John Melone
07/31/2000 05:28 PM

To: Tony Baney/DC/USEPA/US@EPA
cc:

Subject: USEPA PCB Letter

please handle this and cc me.

---------- Forwarded by John Melone/DC/USEPA/US on 07/31/2000 05:17 PM ----------

race@flash.net on 07/31/2000 05:01:25 PM

To: John Melone/DC/USEPA/US
cc:

Subject: USEPA PCB Letter

CSI ENVIRONMENTAL

3000 Alta Mesa Blvd, Suite 105 □ Fort Worth, Texas □ 76133
Phone: 817.263.1080 □ Fax: 817.292.1957

31 July 2000
Mr. John W. Melone, Jr.
MC 7404
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Re: Alternate PCB Decontamination Methodology Requirements 40 CFR 761.79(h)
Mr. Melone
My name is Geary Cook and I represent Conversion Solutions, Inc. (CSI) located in Fort Worth, Texas. Our firm is in the process of marketing and

distributing a newly available piece of industrial equipment that processes what was once called waste into usable commodities. The machine is manufactured by Startech Environment located in Wilton CT and is called the Plasma Waste Converter□ (PWC□). This equipment utilizes □Plasma Arc□ technology to accomplish elemental recycling. The PWC□ is a closed-loop system and has no free air exhaust system. Outputs from this machine are in the form of 1) syngas-which can be used for fuel or as a manufacturing feedstock, 2) silicates-which can be used in the abrasives industry and 3) metals-which may enter the routine recycle chain. All secondary materials are □used or reused□ pursuant to 40 CFR 261.2(e)(1)(l) and the syngas generated exceeds the requirements of 40 CFR 261.38(a).
Since the PWC□ does not fall under 40 CFR 761.70 or 71, what are the requirements to gain an approval as an alternate decontamination method in accordance with 40 CFR 761.79(h)? PCB material has not actually been processed using a Startech PWC□, however, this system was installed at a U.S. Army facility at the Aberdeen Proving Grounds in Maryland for demonstration of its capabilities to destroy toxic nerve agents and other bio-hazardous waste during 1999 and early 2000. Destruction efficiencies greater than 99.9999999 were obtained and none of any of the chemicals processed were detected in any of the commodity streams exiting the PWC□.
We want to understand these requirements as soon as possible for this appears to be a hurdle for the distribution of this machine to potential customers dealing in PCB contaminated wastes. Additional information may be obtained by contacting us at (817) 263-1080. We appreciate the time you have spent looking into this and look forward to hearing from you soon.

Sincerely,
Geary D. Cook
Vice-President Operations

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